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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR       | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------------|---------------------|------------------|
| 10/817,158  | 04/02/2004  | Marcelo Daniel Baru Fassio | 39438-401600        | 1165             |
| 27717 7590 02/12/2008<br>SEYFARTH SHAW LLP<br>131 S. DEARBORN ST., SUITE 2400<br>CHICAGO, IL 60603-5803 |             |                            |                     |                  |
| EXAMINER<br>MANUEL, GEORGE C  |             |                            |                     |                  |
| ART UNIT  |             | PAPER NUMBER               |                     |                  |
| 3762  |             |                            |                     |                  |
| MAIL DATE   |             | DELIVERY MODE              |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/817,158

**Applicant(s)**

BARU FASSIO ET AL.

**Examiner**

George Manuel

**Art Unit**

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 9-18 and 20-83 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 39-47 is/are allowed.
- 6) ☒ Claim(s) 1-5, 22, 31-34, 37, 38, 48-53, 59, 64-68, 71-73 and 76-83 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 9-18, 20, 21, 23-30, 35, 36, 54-58, 60-63, 69, 70, 74 and 75 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 11/23/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 33, 34, 37, 38 and 48 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by WO 2002/60445.

WO 2002/60445 discloses an implanted multi-channel stimulator and a multipolar nerve stimulation electrode and a nerve cuff. A nerve recording electrode senses foot motion and the sensed motion is recorded and amplified and telemetered to an external signal analysis device. Fig. 13 shows detected gait phase transition events and Fig. 14 shows the response of activated stimulation for the detected gait phase transition events. Programming parameters are disclosed for ramping up the stimulation when the heel is lifted from the ground for each channel. A heel switch senses heel contact with the floor.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-5, 22, 31, 32, 49-53, 59, 64-68, 71-73, 76-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 2002/60445.

WO 2002/60445 fails to disclose a rectifier circuit, an integrator circuit, or a rechargeable battery. One of ordinary skill in the art would have found it obvious to use a rechargeable battery for the power source for the implanted device because a rechargeable battery allows the battery to remain implanted and reduces the discomfort or risk due to infection for battery replacement. Also, rechargeable batteries and rectifier and integrator circuits are well known components for implantable devices to regulate stimulation signals and for sensed signal conditioning.

WO 2002/60445 does not directly disclose using thigh orientation for controlling nerve stimulation. One of ordinary skill in the art would have found it obvious to use thigh orientation based on the suggestion that nerves innervating areas other than the plantar surface of the foot provide enough information to control stimulation. The Peroneal nerve cuff electrode 105 and percutaneous wires 106 from the Peroneal nerve cuff electrode provide a sufficient means to allow one of ordinary skill in the art to produce a signal indicative of the orientation of a patient's thigh and to adjust an output stimulation based on the orientation.

***Allowable Subject Matter***

Claims 6, 7, 9-18, 20, 21, 23-30, 35, 36, 54-58, 60-63, 69, 70, 74 and 75 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 39-47 are allowed.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Manuel whose telephone number is (571) 272-4952.

/George Manuel/  
Primary Examiner  
Art Unit: 3762